

Pushing the Envelope			
2007 Mathematics			
Grade and Course Level Expectations			
Missouri Mathematics			
Grade 5			
Activity/Lesson	State	Standards	
Chemistry (pgs. 25-41)	MO	MA.5.M.2.C.1	Apply appropriate techniques, tools and formulas to determine measurements: determine volume by finding the total number of the same size units needed to fill a space without gaps or overlaps
Physics and Math (pgs. 43-63)	MO	MA.5.A.4.A.1	Analyze change in various contexts: identify, model and describe situations with constant or varying rates of change
Pushing the Envelope			
2007 Mathematics			
Grade and Course Level Expectations			
Missouri Mathematics			
Grade 6			
Activity/Lesson	State	Standards	
History of Aviation Propulsion (pgs. 5-9)	MO	MA.6.M.1.C.1	Understand measurable attributes of objects and the units, systems and processes of measurement: solve problems involving elapsed time (hours and minutes)
Types of Engines (pgs. 11-23)	MO	MA.6.M.2.E.1	Apply appropriate techniques, tools and formulas to determine measurements: convert from one unit to another within a system of measurement (mass and weight)
Physics and Math (pgs. 43-63)	MO	MA.6.N.3.E.1	Compute fluently and make reasonable estimates: solve problems using ratios and rates
Physics and Math (pgs. 43-63)	MO	MA.6.A.4.A.1	Analyze change in various contexts: construct and analyze representations to compare situations with constant or varying rates of change
Pushing the Envelope			
2007 Mathematics			
Grade and Course Level Expectations			
Missouri Mathematics			
Grade 7			
Activity/Lesson	State	Standards	
History of Aviation Propulsion (pgs. 5-9)	MO	MA.7.M.1.C.1	Understand measurable attributes of objects and the units, systems and processes of measurement: solve problems involving addition and subtraction of time (hours, minutes and seconds)
Chemistry (pgs. 25-41)	MO	MA.7.M.1.B.1	Understand measurable attributes of objects and the units, systems and processes of measurement: identify the equivalent area and volume measures within a system of measurement (e.g., sq ft. to sq in, m ³ to c m ³)

Physics and Math (pgs. 43-63)	MO	MA.7.N.3.E.1	Compute fluently and make reasonable estimates: solve problems involving proportions, such as scaling and finding equivalent ratios
Physics and Math (pgs. 43-63)	MO	MA.7.A.4.A.1	Analyze change in various contexts: compare situations with constant or varying rates of change
Pushing the Envelope			
2007 Mathematics			
Grade and Course Level Expectations			
Missouri Mathematics			
Grades 9-12 (Algebra I)			
Activity/Lesson	State	Standards	
Physics and Math (pgs. 43-63)	MO	MA.9-12.A.4.A.1	Analyze change in various contexts: analyze linear and quadratic functions by investigating rates of change, intercepts and zeros